



Souder, Miller & Associates ♦ 201 S. Halagueno St. ♦ Carlsbad, NM 88220
(575) 689-8801

November 23, 2020

#5E29133-BG31

NMOCD District 1
1625 N. French Dr.
Hobbs, New Mexico 88240

SUBJECT: Remediation Closure Report for the Bradley A 1 Release (1RP-4901), Lea County, New Mexico

To Whom It May Concern:

On behalf of Devon Energy Production Company, Souder, Miller & Associates (SMA) has prepared this Remediation Closure Report that describes the remediation of a release of liquids related to oil and gas production activities at the Bradley A 1 site. The site is in Unit F, Section 19, Township 23S, Range 34E, Lea County, New Mexico, on Federal land. Figure 1 illustrates the vicinity and site location on an USGS 7.5-minute quadrangle map.

Table 1 summarizes release information and Closure Criteria.

Table 1: Release Information and Closure Criteria			
Name	Bradley A 1	Company	Devon Energy Production Company
API Number	30-025-21168	Location	32.291858 -103.512759
Tracking Number	1RP-4901		
Estimated Date of Release	December 13, 2017	Date Reported to NMOCD	December 14, 2017
Land Owner	State Land Office of New Mexico	Reported To	NMOCD, BLM, NMSLO
Source of Release	Illegal Transport Dumping		
Released Volume	Unknown	Released Material	Produced Water
Recovered Volume	0 BBLS	Net Release	Unknown
NMOCD Closure Criteria	>100 feet to groundwater		
SMA Response Dates	8/4/2020, 8/18/2020, 9/25/2020, 9/27/2020, 9/29/2020, 10/23/2020		

1.0 Background

On December 13, 2017, a release was discovered at the Bradley A 1 site due to an illegal transport dumping event that had occurred. Initial response activities were conducted by Devon Energy, and included site stabilization activities. Figure 1 illustrates the vicinity and site location; Figure 2 illustrates the release location. The C-141 form is included in Appendix A.

2.0 Site Information and Closure Criteria

The Bradley A 1 is an active production facility located approximately 22.50 miles northwest of Jal, New Mexico on State land at an elevation of approximately 3536 feet above mean sea level (amsl).

Depth to Groundwater

Based upon New Mexico Office of the State Engineer (Appendix B), depth to groundwater in the area is estimated to be 330 feet below grade surface (bgs).

Wellhead Protection Area

There is one known water sources within ½-mile of the location, according to the New Mexico Office of the State Engineer (NMOSE) online water well database. The one water source is water well (C-04353), which was completed on November 13, 2019 with a depth to groundwater recorded at 330 feet bgs.

Distance to Nearest Significant Watercourse

The nearest significant watercourse is an unnamed draw, located approximately 1,385 feet to the northwest.

Table 2 demonstrates the Closure Criteria applicable to this location. Figure 2 illustrates the site with 200 and 300-foot radii to indicate that it does not lie within a sensitive area as described in 19.15.29.12.C(4) NMAC.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of greater than 100 feet bgs.

3.0 Release Characterization and Remediation Activities

On August 4, 2020 and August 18, 2020, SMA personnel performed site delineation activities at the Bradley A 1 site. SMA collected soil samples around the release site and throughout the visibly stained area. The area of visual impact was located entirely within the boundary of the developed production. Soil samples were field screened for chloride using an electrical conductivity (EC) meter and for hydrocarbon impacts using a calibrated MiniRAE 3000 photoionization detector (PID) equipped with a 10.6 eV lamp.

A total of five (5) sample locations (S1-S5) as well as five (5) sidewalls (SW1 - SW5) were investigated using a hand-auger, to depths of two (2) feet bgs, as determined by field screening and laboratory analysis to delineate the release. A total of eighteen (18) samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D.

Between September 25, 2020, September 27, 2020 and October 23, 2020, SMA returned to the site to guide the excavation of contaminated soil. SMA guided the excavation activities by collecting soil samples for field screening. Samples were screened for chloride using an electrical conductivity (EC) meter and for hydrocarbon impacts using a calibrated MiniRAE 3000 photoionization detector (PID)

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November 23, 2020

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equipped with a 10.6 eV lamp. The walls and base were excavated until field screening results indicated that the NMOCD Closure Criteria would be met. NMOCD was notified on September 24, 2020 that confirmation samples were expected to be collected in two (2) business days.

On September 29, 2020, SMA collected confirmation samples from the excavation. Confirmation samples were comprised of five-point composites of the base (SC1 – CS5) and sidewalls (SW1 – SW5). Upon receipt of the laboratory results, it was determined that further excavation was needed on the north (SW1), east (SW2), and southwestern (SW4) sidewalls. After further excavation was completed, SMA collected confirmation samples of these locations of October 23, 2020. The final excavation measured approximately 100 by 30 feet and was 1 – 2 feet in depth.

A total of thirteen samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D. Laboratory samples were collected in accordance with the sampling protocol included in Appendix C. Samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico (Appendix D).

Figure 3 shows the site and initial sample locations, Figure 3(A) shows the extent of the final excavation and closure sample locations. All field screening and laboratory results are summarized in Table 3. Laboratory reports are included in Appendix D.

4.0 Site Recommendations

As demonstrated in Table 3, all closure samples meet the Closure Criteria. The site has been remediated to meet the standards of Table I of 19.15.29.12 NMAC.

Contaminated soils were removed and replaced with clean backfill material to return the surface to previous contours. The contaminated soil was transported and disposed of at Northern Delaware Basin Landfill near Jal, NM, an NMOCD-permitted disposal facility.

SMA recommends no further action and requests closure of 1RP-4901.

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5.0 Scope and Limitations

The scope of our services included: assessment sampling; verifying release stabilization; regulatory liaison; remediation; and preparing this report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

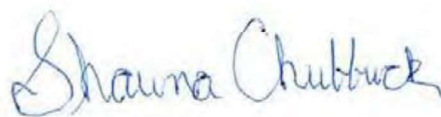
If there are any questions regarding this report, please contact either Ashley Maxwell at 505-320-8975 or Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Reviewed by:



Ashley Maxwell
Project Scientist



Shawna Chubbuck
Senior Scientist

REFERENCES:

New Mexico Office of the State Engineer (NMOSE) online water well database
https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed 11/19/2020

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ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map

Figure 2: Surface Water Radius Map

Figure 3: Site and Initial Sample Location Map

Figure 3A: Site and Confirmation Sample Location Map

Tables:

Table 2: NMOCD Closure Criteria Justification

Table 3: Summary of Sample Results

Appendices:

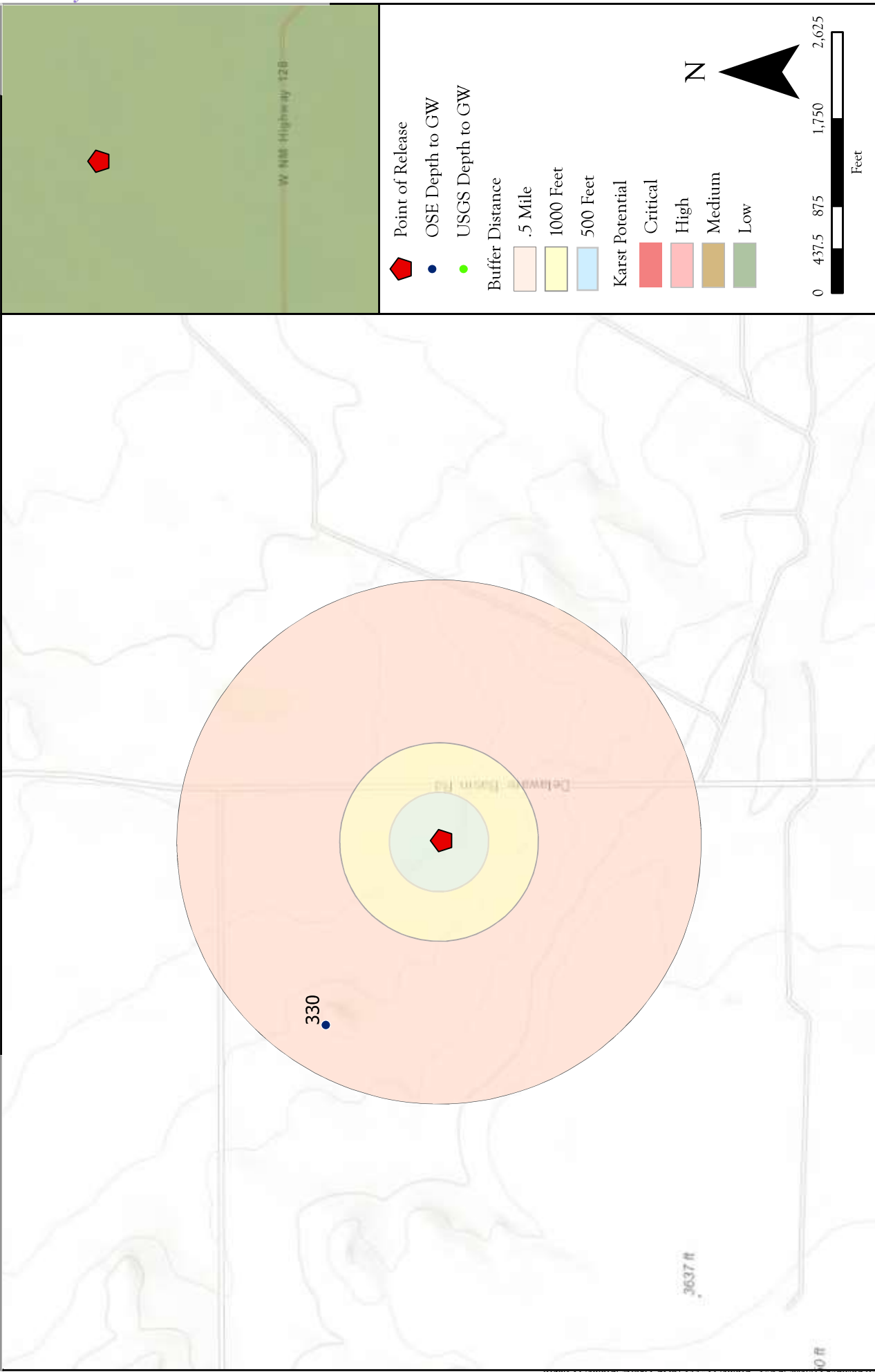
Appendix A: Form C141

Appendix B: NMOSE Wells Report

Appendix C: Sampling Protocol and Field Notes

Appendix D: Laboratory Analytical Reports

FIGURES




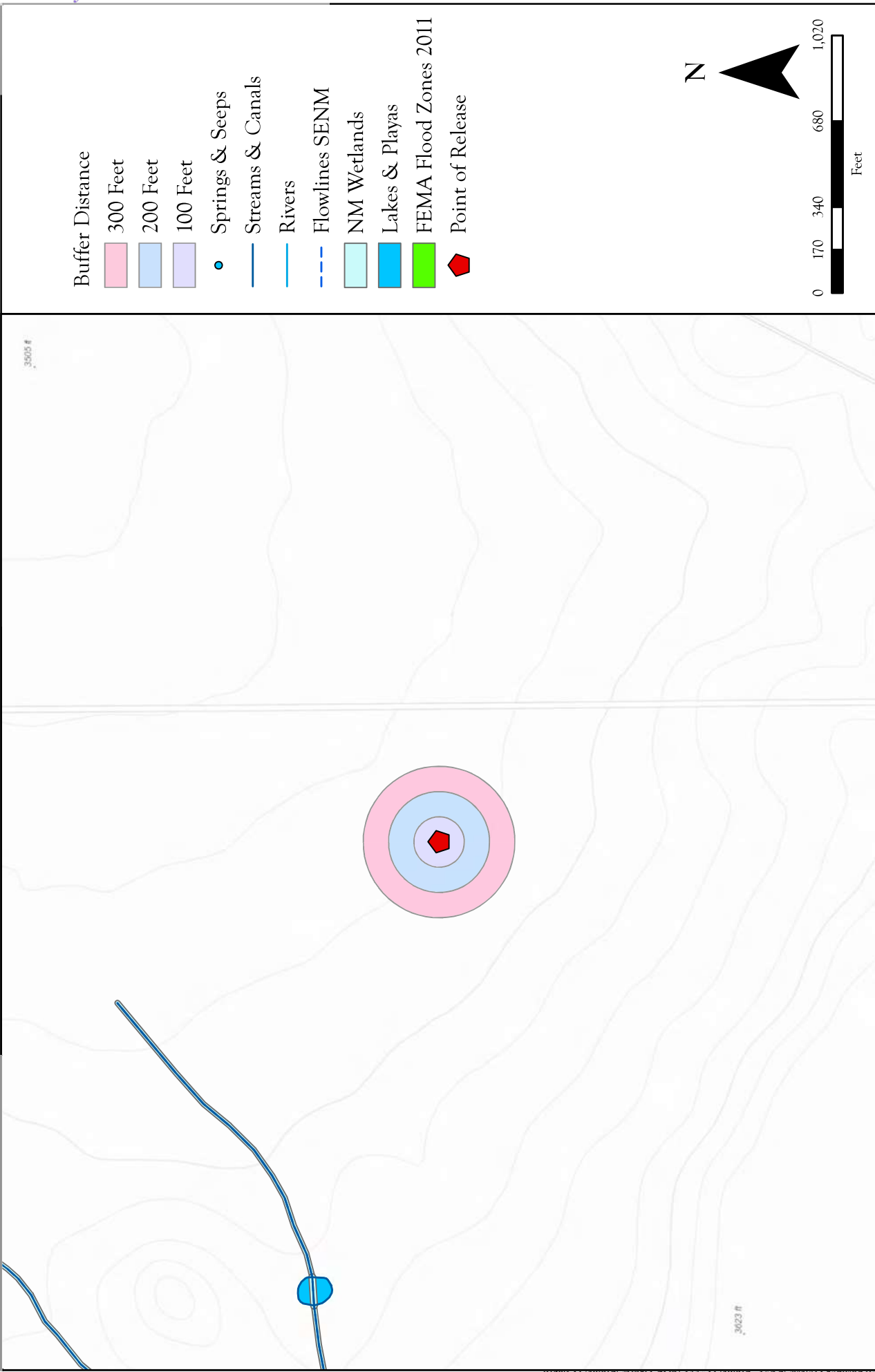
Site Map Bradley A #001 - Devon Energy Production Company UL: F S: 19 T: 23S R: 34E, Lea County, New Mexico			
Date Saved: 8/13/2020		Lynn A. Acosta	
By: _____ Date: _____ Descr: _____		Drawn _____	
By: _____ Date: _____ Descr: _____		Date _____	
© Souder, Miller & Associates, 2020, All Rights Reserved		Checked _____	
		Approved _____	


Figure 1

201 South Halaquena Street
Carlsbad, New Mexico 88221
(575) 689-7040
Serving the Southwest & Rocky Mountains



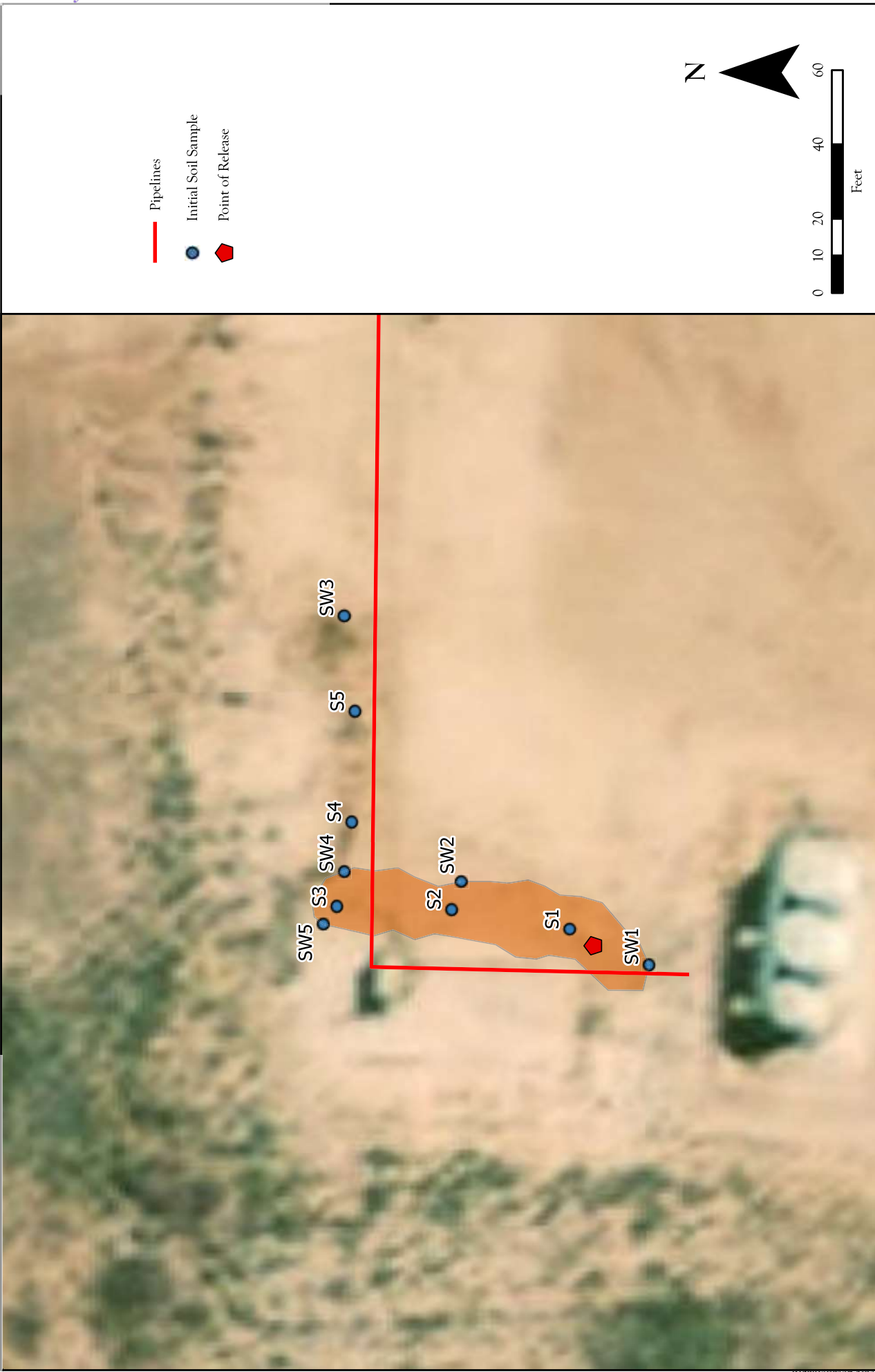
Surface Water Protection Map
Bradley A 1- Devon Energy Production Company
UL: F S: 19 T: 23S R: 34E Lea County, New Mexico

Figure 2




201 South Halaquena Street
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Revisions	By: _____	Date: _____	Descr: _____
	By: _____	Date: _____	Descr: _____
	© Souder, Miller & Associates, 2020, All Rights Reserved		
Date Saved: 11/6/2020	Drawn Date	Lynn A. Acosta 11/20/2020	
	Checked		
	Approved		



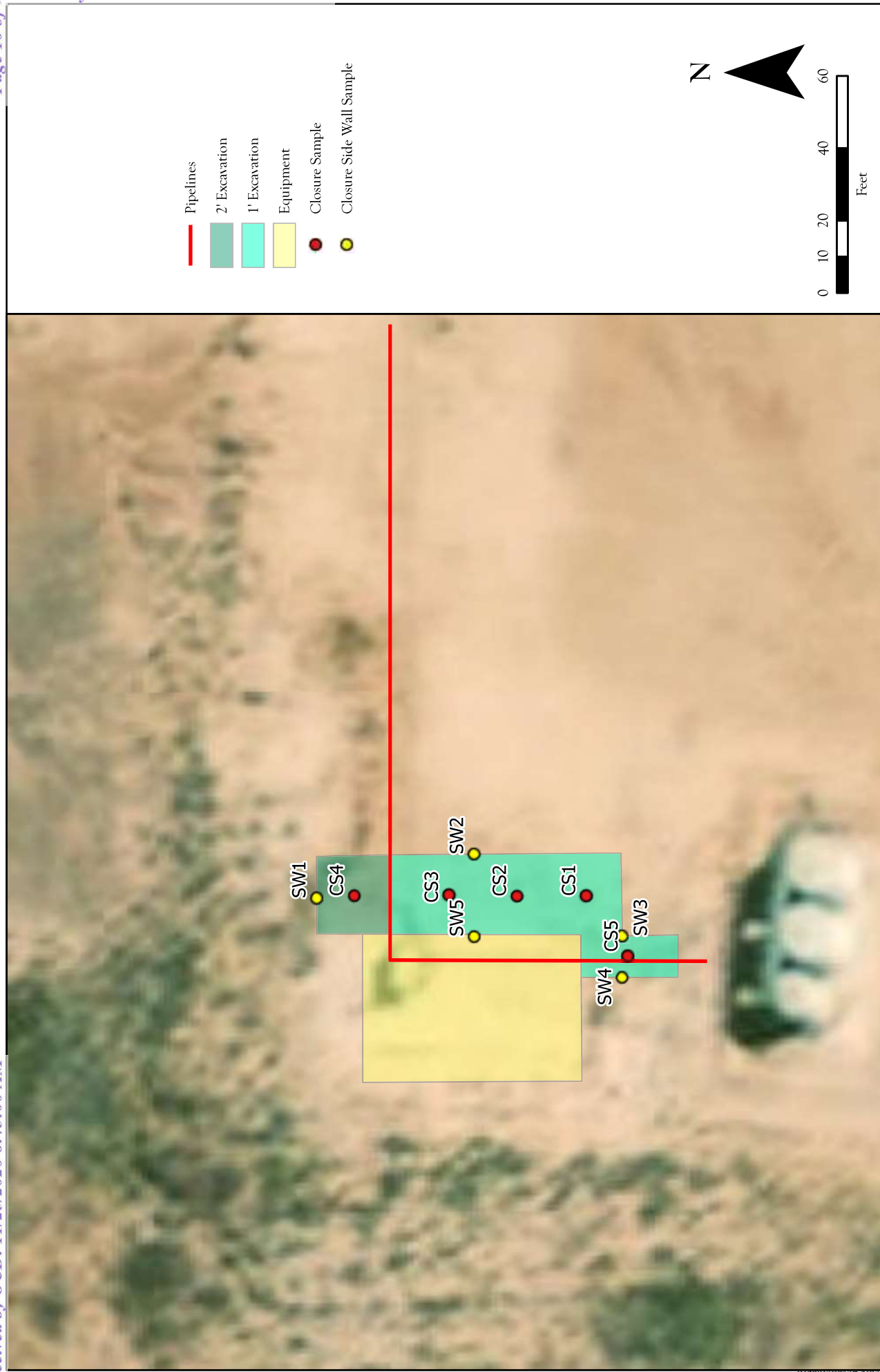
Site and Initial Sample Location Map
Bradley A #001 - Devon Energy Production Company
UL: F S: 19 T: 23S R: 34E - Lea County, New Mexico




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	By: _____	Date: _____	Descr: _____
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	Date Saved: 11/23/2020		

Drawn	P.R. Smith
Date	11/23/2020
Checked	_____
Approved	_____



Site and Confirmation Sample Location Map
Bradley A #001 - Devon Energy Production Company
UL: F S: 19 T: 23S R: 34E - Lea County, New Mexico



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	By: _____	Date: _____	Descr: _____
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Drawn	P.R. Smith		
Date	11/19/2020		
Checked	_____		
Approved	_____		

TABLES

Table 2:
NMOCD Closure Criteria

Devon Energy Production Company
Bradley A #001
nOY1736030513

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	330	New Mexico Office of the State Engineer
Horizontal Distance From All Water Sources Within 1/2 Mile (ft)	2158.79	United States Geological Survey Topo Map
Horizontal Distance to Nearest Significant Watercourse (ft)	1,385	United States Geological Survey Topo Map

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater	Closure Criteria (units in mg/kg)					
	Chloride *numerical limit or background, whichever is greater	TPH	GRO + DRO	BTEX	Benzene	
	< 50' BGS	100		50	10	10
	51' to 100'	2500	1000	50	10	10
	>100'	2500	1000	50	10	10
Surface Water	if yes, then					
<300' from continuously flowing watercourse or other significant watercourse?						
<200' from lakebed, sinkhole or playa lake?	No					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
<1000' from fresh water well or spring?	No					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	No					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
<100' from wetland?	No					
within area overlying a subsurface mine	No					
within an unstable area?	No					
within a 100-year floodplain?	No					

SMA #

Table 3:
Summary of Sample Results

Devon Energy Production Company
Bradley A 1
nOY1736030513

Sample ID	Sample Date	Depth of Sample (feet bgs)	Action Taken	Method 8021B		Method 8015D				Method 300.0
				BTEX	Benzene	GRO	DRO	MRO	Total TPH	CI-
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
NMOCD Reclamation Requirement (0-4 ft)										
NMOCD Closure Criteria (>4 ft)										
S1	8/4/2020	Surface	Excavated	<0.212	<0.024	<4.7	620	15000	15620	<60
		1	In-Situ	<0.219	<0.024	<4.9	21	76	97	<60
S2	8/4/2020	Surface	Excavated	<0.217	<0.024	<4.8	<450	15000	15000	<60
		1	In-Situ	<0.219	<0.024	<4.9	140	610	750	<60
S3	8/4/2020	Surface	Excavated	<0.222	<0.025	<4.9	670	19000	19670	<60
		1	Excavated	<0.217	<0.024	<4.8	250	4900	5150	<60
	8/18/2020	2	In-Situ	-	-	<4.9	<9.5	<47	<61.4	-
S4	8/4/2020	Surface	In-Situ	<0.222	<0.025	<4.9	<9.5	110	110	<60
		1	In-Situ	<0.210	<0.023	<4.7	<9.8	<49	<63.5	<60
S5	8/4/2020	Surface	In-Situ	<0.213	<0.024	<4.7	13	110	123	<60
		1	In-Situ	<0.219	<0.024	<4.9	<9.2	<46	<60.1	<60
SW1	8/4/2020	Surface	Excavated	<0.216	<0.024	<4.8	13	210	223	<60
	8/18/2020		In-Situ	-	-	<4.6	<9.4	<4.6	<18.6	-
SW2	8/4/2020	Surface	Excavated	<0.211	<0.023	<4.7	51	1800	1851	<60
	8/18/2020		In-Situ	-	-	<4.9	<9.3	<46	<60.2	-
SW3	8/4/2020	Surface	In-Situ	<0.216	<0.024	<4.8	<9.9	<49	<63.7	<60
SW4	8/4/2020	Surface	In-Situ	<0.225	<0.025	<5.0	<9.6	<48	<62.6	<60
SW5	8/4/2020	Surface	In-Situ	<0.210	<0.023	<4.7	<9.7	<48	<62.4	<60
Confirmation Samples										
CS1			In-Situ	<0.215	<0.024	<4.8	<9.9	<49	<63.7	670
CS2		1	In-Situ	<0.212	<0.024	<4.7	<9.9	<49	<63.6	570
CS3	9/29/2020		In-Situ	<0.217	<0.024	<4.8	<9.8	<49	<63.6	280
CS4		2	In-Situ	<0.221	<0.025	<4.9	<9.5	<48	<62.4	130
CS5		1	In-Situ	<0.222	<0.025	<4.9	<9.4	<47	<61.3	280
SW1	9/29/2020	0-2	Excavated	<0.219	<0.024	<4.9	<9.7	210	210	<60
	10/23/2020		In-Situ	<0.225	<0.025	<5.0	<9.6	<48	62.6	<60
SW2	9/29/2020	0-1 / 0-2	Excavated	<0.217	<0.024	<4.8	9.8	410	419.8	<60
	10/23/2020		In-Situ	<0.225	<0.025	<5.0	<9.6	<48	<62.6	<60
SW3	9/29/2020	0-1	In-Situ	<0.210	<0.023	<4.7	<9.9	<49	<63.6	<60
SW4	9/29/2020	0-1	Excavated	<0.216	<0.024	<4.8	9.7	360	369.7	<60
	10/23/2020		In-Situ	<0.220	<0.024	<4.9	<9.2	<46	60.1	<60
SW5	9/29/2020	0-1 / 0-2	In-Situ	<0.217	<0.024	<4.8	<9.6	<48	<62.4	<60

"-" = Not Analyzed

BG: Background sample

SMA #

APPENDIX A

FORM C141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017
Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production Company	Contact Hub Perry, Production Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88210	Telephone No. 575-513-9637
Facility Name Bradley A 1	Facility Type Oil
Surface Owner State	Mineral Owner Federal
API No. 30-025-21168	

LOCATION OF RELEASE

Unit Letter F	Section 19	Township 23S	Range 34E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	---------------

Latitude 32.291858 Longitude 103.512759 NAD83

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release Unknown Volume	Volume Recovered 0 bbls
Source of Release Illegal Dumping	Date and Hour of Occurrence December 13, 2017 @ 1:30 PM MST	Date and Hour of Discovery December 13, 2017 @ 1:30 PM MST
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Shelly Tucker, BLM Olivia Yu, OCD Amber Groves, SLO	
By Whom? Mike, Shoemaker, EHS Representative	Date and Hour December 14, 2017 @ 12:15 PM MST	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

RECEIVED

By Olivia Yu at 8:23 am, Dec 26, 2017


If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
A Devon contract company arrived at the location to perform work and observed fluid on the location surface. The crew contacted their supervisor who then contacted Devon staff. Devon staff responded to the location and observed what appears to be an illegal transport dumping event.

Describe Area Affected and Cleanup Action Taken.*
Unknown amount of produced water was released on pad surface in between the tanks and stack pack running in a Northeasterly direction. An environmental contractor will be contacted to assist with the delineation and remediation activities.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

Signature: Sheila Fisher	Approved by Environmental Specialist: 	
Printed Name: Sheila Fisher	Approval Date: 12/26/2017	Expiration Date:
Title: Field Admin Support	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
E-mail Address: Sheila.Fisher@dv.com		
Date: 12.18.17 Phone: 575.748.1829		

* Attach Additional Sheets If Necessary

1RP-4901

nOY1736030513

pOY1736030833

Incident ID	NOY1736030513
District RP	1RP-4190
Facility ID	
Application ID	pOY1736030833

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>330</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Incident ID	NOY1736030513
District RP	1RP-4190
Facility ID	
Application ID	pOY1736030833

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Tom Bynum Title: EHS Consultant

Signature: Tom Bynum Date: 11/24/2020

email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NOY1736030513
District RP	1RP-4190
Facility ID	
Application ID	pOY1736030833

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Tom Bynum Title: EHS Consultant
Signature: Tom Bynum Date: 11/24/2020
email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Brittany Hall Date: 9/20/2022
Printed Name: Brittany Hall Title: Environmental Specialist

APPENDIX B

NMOSE WELLS REPORT



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Distance	Depth	Well	Depth	Water Column
C_04353 POD1		CUB	ED	4	2	2	24	23S	33E	639474	3574098	658		603		330 273
													Average Depth to Water:		330 feet	
													Minimum Depth:		330 feet	
													Maximum Depth:		330 feet	

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 640038

Northing (Y): 3573758

Radius: 806

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/13/20 4:59 PM

WATER COLUMN/ AVERAGE DEPTH TO
WATER



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

2020 JAN 29 11:11:10

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1		WELL TAG ID NO.		OSE FILE NO(S) C-4353		
	WELL OWNER NAME(S) HUGHES PROPERTIES LLC				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS P.O. BOX 5097				CITY CARLSBAD	STATE NM	ZIP 88221
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 17	SECONDS 42.00000 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE -103	31	7.300000 W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE1/4 OF NE1/4 OF NE1/4 OF SECTION 24, TOWNSHIP 23S, RANGE 33E							
2. DRILLING & CASING INFORMATION	LICENSE NO. WD- 1737		NAME OF LICENSED DRILLER JUSTIN MULLINS			NAME OF WELL DRILLING COMPANY SHADE TREE DRILLING	
	DRILLING STARTED 11-4-19	DRILLING ENDED 11-13-19	DEPTH OF COMPLETED WELL (FT) 603	BORE HOLE DEPTH (FT) 601	DEPTH WATER FIRST ENCOUNTERED (FT) 330		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 330		
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	0 301		12.25	6 5/8 STEEL	WELDED	6 1/8	1/4
	301 601		12.25	6 5/8 STEEL	WELDED	6 1/8	1/4
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	0 20		12 1/4	PORTLAND CEMENT	19	HAND	
	20 601		12 1/4	3/8 PEA GRAVEL	340	HAND	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. C-4353	POD NO. 1	TRN NO. 658327
LOCATION 224 T23S R33E Sec 24	WELL TAG ID NO. N/A	PAGE 1 OF 2

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING (YES/NO)	ESTIMATE YIELD PER FOOT OF WATER- BEARING ZONES
	FROM	TO				
4. HYDROGEOLOGIC LOG OF WELL	0	2	2	TOPSOIL	Y ✓	
	2	14	12	CALICHE	Y ✓	
	14	128	114	RED CLAY	Y ✓ N	
	128	240	112	BLUE CLAY	Y ✓ N	
	240	273	33	LIMESTONE	Y ✓ N	
	273	300	27	CLAY	Y ✓ N	
	300	330	30	ROCK	Y ✓ N	
	330	344	14	SAND	✓ Y N	30.00
	344	394	50	SAND STONE	Y ✓ N	
	394	430	36	CLAY	Y ✓ N	
	430	437	7	ROCK	Y ✓ N	
	437	601	164	CLAY	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 30.00
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION:					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: PETE LOWEN					
6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING. Justin Mullins JUSTIN MULLINS SIGNATURE OF DRILLER / PRINT SIGNEE NAME					11-16-19 DATE

FOR USE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 04/30/2019)	
FILE NO.	C-4353	POD NO.	1
LOCATION	224 T735 R33E S42.4	TRN NO.	658327
		WELL TAG ID NO.	NA
			PAGE 2 OF 2

APPENDIX C SAMPLING PROTOCOL & FIELD NOTES



Sampling Protocol

Representatives from SMA chose the Judgmental Sampling Method as described in EPA's Final Sampling Guidance for SW-846, 2002 to adequately quantify contaminant concentrations on Cotton Draw Unit #294H Location. The utility of this particular method functions on the sufficient knowledge of the contaminant, which we possess. This design is also useful when identifying the composition of a release, which we have documented. In addition, this sampling design was chosen for this project because of the locations uniform soil type, and the several operational considerations (such as the liner within the battery and the construction of a new facility) that precluded the implementation of a different statistical design.

The soil samples were collected in laboratory supplied containers in accordance with this sampling protocol, immediately placed on ice and sent under standard chain-of-custody protocols to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico for analysis. A total of eight (8) samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D.

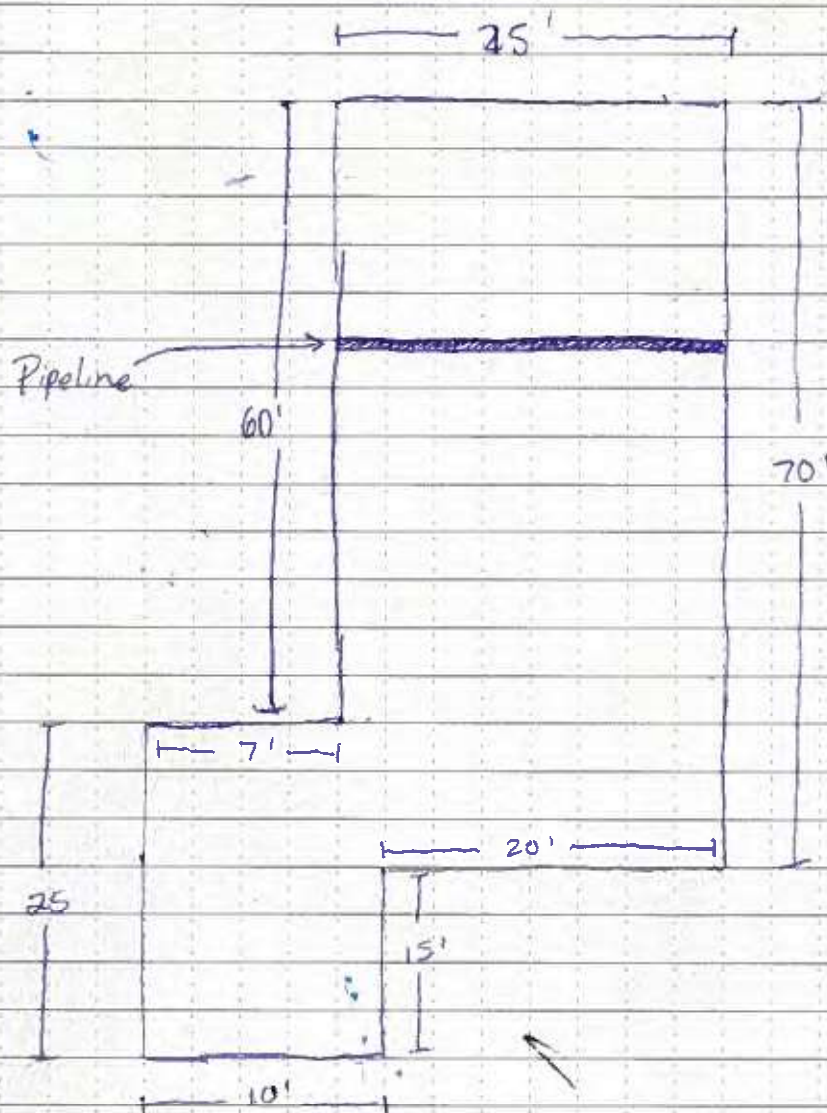
Sampling Analysis Field Quality Assurance Procedures

A unique sample numbering was used to identify each sample collected and designated for on-site and off-site laboratory analysis. The purpose of this numbering scheme was to provide a tracking system for the retrieval of analytical and field data on each sample. Sample identification numbers were recorded on sample labels or tags, field notes, chain-of-custody records (COC) and all other applicable documentation used during the project. Sample labels were affixed to all sample containers during sampling activities. Information was recorded on each sample container label at the time of sample collection. The information recorded on the labels were as follows: sample identification number; sample type (discrete or composite); site name and area/location number; analysis to be performed; type of chemical preservative present in container; date and time of sample collection; and sample collector's name and initials. All samples were packed in ice in an approved rigid body container, custody sealed signed and shipped to the appropriate laboratory via insured courier service.

COC procedures implemented for the project provided documentation of the handling of each sample from the time of collection until completion of laboratory analysis. A COC form serves as a legal record of possession of the sample. A sample is considered to be under custody if one or more of the following criteria are met: the sample is in the sampler's possession; the sample is in the sampler's view after being in possession; the sample was in the sampler's possession and then was placed into a locked area to prevent tampering; and/or the sample is in a designated secure area. Custody was documented throughout the project field sampling activities by a chain-of custody form initiated each day during which samples are collected. Container custody seals placed on either individual samples or on the rigid body container were used to ensure that no sample tampering occurs between the time the samples are placed into the containers and the time the containers are opened for analysis at the laboratory. Container custody seals were signed and dated by the individual responsible for completing the COC form contained within the container.

Excavation (9/25 & 9/27)

7:30 Arrived on location, met w/ BDS app. Began excavating areas located in NW corner of well pad. Two sections were excavated @ 1' & 2'.



APPENDIX D

LABORATORY ANALYTICAL REPORTS



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

August 13, 2020

Ashley Maxwell
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-8801
FAX:

RE: Bradley A 001

OrderNo.: 2008253

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 15 sample(s) on 8/6/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S1 Surface

Project: Bradley A 001

Collection Date: 8/4/2020 11:00:00 AM

Lab ID: 2008253-001

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	8/11/2020 9:03:13 PM	54328
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/9/2020 5:30:09 AM	54239
Surr: BFB	98.8	70-130		%Rec	1	8/9/2020 5:30:09 AM	54239
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	620	190		mg/Kg	20	8/10/2020 2:51:53 PM	54245
Motor Oil Range Organics (MRO)	15000	950		mg/Kg	20	8/10/2020 2:51:53 PM	54245
Surr: DNOP	0	30.4-154	S	%Rec	20	8/10/2020 2:51:53 PM	54245
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/9/2020 5:30:09 AM	54239
Toluene	ND	0.047		mg/Kg	1	8/9/2020 5:30:09 AM	54239
Ethylbenzene	ND	0.047		mg/Kg	1	8/9/2020 5:30:09 AM	54239
Xylenes, Total	ND	0.094		mg/Kg	1	8/9/2020 5:30:09 AM	54239
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%Rec	1	8/9/2020 5:30:09 AM	54239
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	8/9/2020 5:30:09 AM	54239
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/9/2020 5:30:09 AM	54239
Surr: Toluene-d8	97.5	70-130		%Rec	1	8/9/2020 5:30:09 AM	54239

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S1 1'

Project: Bradley A 001

Collection Date: 8/4/2020 11:03:00 AM

Lab ID: 2008253-002

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	8/11/2020 10:04:57 PM	54328
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/9/2020 5:58:44 AM	54239
Surr: BFB	107	70-130		%Rec	1	8/9/2020 5:58:44 AM	54239
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	21	9.8		mg/Kg	1	8/12/2020 3:42:03 PM	54245
Motor Oil Range Organics (MRO)	76	49		mg/Kg	1	8/12/2020 3:42:03 PM	54245
Surr: DNOP	153	30.4-154		%Rec	1	8/12/2020 3:42:03 PM	54245
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/9/2020 5:58:44 AM	54239
Toluene	ND	0.049		mg/Kg	1	8/9/2020 5:58:44 AM	54239
Ethylbenzene	ND	0.049		mg/Kg	1	8/9/2020 5:58:44 AM	54239
Xylenes, Total	ND	0.097		mg/Kg	1	8/9/2020 5:58:44 AM	54239
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%Rec	1	8/9/2020 5:58:44 AM	54239
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/9/2020 5:58:44 AM	54239
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/9/2020 5:58:44 AM	54239
Surr: Toluene-d8	102	70-130		%Rec	1	8/9/2020 5:58:44 AM	54239

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S2 Surface

Project: Bradley A 001

Collection Date: 8/4/2020 11:06:00 AM

Lab ID: 2008253-003

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	8/11/2020 10:17:18 PM	54328
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/9/2020 6:27:19 AM	54239
Surr: BFB	102	70-130		%Rec	1	8/9/2020 6:27:19 AM	54239
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	450	D	mg/Kg	50	8/12/2020 1:13:42 AM	54245
Motor Oil Range Organics (MRO)	15000	2200		mg/Kg	50	8/12/2020 1:13:42 AM	54245
Surr: DNOP	0	30.4-154	S	%Rec	50	8/12/2020 1:13:42 AM	54245
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/9/2020 6:27:19 AM	54239
Toluene	ND	0.048		mg/Kg	1	8/9/2020 6:27:19 AM	54239
Ethylbenzene	ND	0.048		mg/Kg	1	8/9/2020 6:27:19 AM	54239
Xylenes, Total	ND	0.097		mg/Kg	1	8/9/2020 6:27:19 AM	54239
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%Rec	1	8/9/2020 6:27:19 AM	54239
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	8/9/2020 6:27:19 AM	54239
Surr: Dibromofluoromethane	108	70-130		%Rec	1	8/9/2020 6:27:19 AM	54239
Surr: Toluene-d8	98.6	70-130		%Rec	1	8/9/2020 6:27:19 AM	54239

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S2 1'

Project: Bradley A 001

Collection Date: 8/4/2020 11:09:00 AM

Lab ID: 2008253-004

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	8/11/2020 10:29:38 PM	54328
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/9/2020 6:55:57 AM	54239
Surr: BFB	101	70-130		%Rec	1	8/9/2020 6:55:57 AM	54239
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	140	90		mg/Kg	10	8/12/2020 2:26:47 AM	54245
Motor Oil Range Organics (MRO)	610	450		mg/Kg	10	8/12/2020 2:26:47 AM	54245
Surr: DNOP	0	30.4-154	S	%Rec	10	8/12/2020 2:26:47 AM	54245
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/9/2020 6:55:57 AM	54239
Toluene	ND	0.049		mg/Kg	1	8/9/2020 6:55:57 AM	54239
Ethylbenzene	ND	0.049		mg/Kg	1	8/9/2020 6:55:57 AM	54239
Xylenes, Total	ND	0.097		mg/Kg	1	8/9/2020 6:55:57 AM	54239
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%Rec	1	8/9/2020 6:55:57 AM	54239
Surr: 4-Bromofluorobenzene	95.8	70-130		%Rec	1	8/9/2020 6:55:57 AM	54239
Surr: Dibromofluoromethane	108	70-130		%Rec	1	8/9/2020 6:55:57 AM	54239
Surr: Toluene-d8	97.7	70-130		%Rec	1	8/9/2020 6:55:57 AM	54239

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S3 Surface

Project: Bradley A 001

Collection Date: 8/4/2020 11:12:00 AM

Lab ID: 2008253-005

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 5:13:06 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/9/2020 7:24:37 AM	54239
Surr: BFB	98.3	70-130		%Rec	1	8/9/2020 7:24:37 AM	54239
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	670	190		mg/Kg	20	8/10/2020 6:30:17 PM	54245
Motor Oil Range Organics (MRO)	19000	960		mg/Kg	20	8/10/2020 6:30:17 PM	54245
Surr: DNOP	0	30.4-154	S	%Rec	20	8/10/2020 6:30:17 PM	54245
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/9/2020 7:24:37 AM	54239
Toluene	ND	0.049		mg/Kg	1	8/9/2020 7:24:37 AM	54239
Ethylbenzene	ND	0.049		mg/Kg	1	8/9/2020 7:24:37 AM	54239
Xylenes, Total	ND	0.099		mg/Kg	1	8/9/2020 7:24:37 AM	54239
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	8/9/2020 7:24:37 AM	54239
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	1	8/9/2020 7:24:37 AM	54239
Surr: Dibromofluoromethane	102	70-130		%Rec	1	8/9/2020 7:24:37 AM	54239
Surr: Toluene-d8	99.4	70-130		%Rec	1	8/9/2020 7:24:37 AM	54239

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S3 1'

Project: Bradley A 001

Collection Date: 8/4/2020 11:15:00 AM

Lab ID: 2008253-006

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 5:50:20 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/9/2020 1:28:34 PM	54246
Surr: BFB	103	70-130		%Rec	1	8/9/2020 1:28:34 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	250	95		mg/Kg	10	8/10/2020 6:33:22 PM	54253
Motor Oil Range Organics (MRO)	4900	470		mg/Kg	10	8/10/2020 6:33:22 PM	54253
Surr: DNOP	0	30.4-154	S	%Rec	10	8/10/2020 6:33:22 PM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/9/2020 1:28:34 PM	54246
Toluene	ND	0.048		mg/Kg	1	8/9/2020 1:28:34 PM	54246
Ethylbenzene	ND	0.048		mg/Kg	1	8/9/2020 1:28:34 PM	54246
Xylenes, Total	ND	0.097		mg/Kg	1	8/9/2020 1:28:34 PM	54246
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%Rec	1	8/9/2020 1:28:34 PM	54246
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	8/9/2020 1:28:34 PM	54246
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/9/2020 1:28:34 PM	54246
Surr: Toluene-d8	102	70-130		%Rec	1	8/9/2020 1:28:34 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S4 Surface

Project: Bradley A 001

Collection Date: 8/4/2020 11:18:00 AM

Lab ID: 2008253-007

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 6:27:34 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/9/2020 2:54:28 PM	54246
Surr: BFB	100	70-130		%Rec	1	8/9/2020 2:54:28 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/10/2020 6:57:27 PM	54253
Motor Oil Range Organics (MRO)	110	47		mg/Kg	1	8/10/2020 6:57:27 PM	54253
Surr: DNOP	95.8	30.4-154		%Rec	1	8/10/2020 6:57:27 PM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	8/9/2020 2:54:28 PM	54246
Toluene	ND	0.049		mg/Kg	1	8/9/2020 2:54:28 PM	54246
Ethylbenzene	ND	0.049		mg/Kg	1	8/9/2020 2:54:28 PM	54246
Xylenes, Total	ND	0.099		mg/Kg	1	8/9/2020 2:54:28 PM	54246
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	1	8/9/2020 2:54:28 PM	54246
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	8/9/2020 2:54:28 PM	54246
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/9/2020 2:54:28 PM	54246
Surr: Toluene-d8	101	70-130		%Rec	1	8/9/2020 2:54:28 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S4 1'

Project: Bradley A 001

Collection Date: 8/4/2020 11:21:00 AM

Lab ID: 2008253-008

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 6:39:59 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/9/2020 3:23:09 PM	54246
Surr: BFB	99.6	70-130		%Rec	1	8/9/2020 3:23:09 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/10/2020 7:21:25 PM	54253
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/10/2020 7:21:25 PM	54253
Surr: DNOP	98.3	30.4-154		%Rec	1	8/10/2020 7:21:25 PM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.023		mg/Kg	1	8/9/2020 3:23:09 PM	54246
Toluene	ND	0.047		mg/Kg	1	8/9/2020 3:23:09 PM	54246
Ethylbenzene	ND	0.047		mg/Kg	1	8/9/2020 3:23:09 PM	54246
Xylenes, Total	ND	0.093		mg/Kg	1	8/9/2020 3:23:09 PM	54246
Surr: 1,2-Dichloroethane-d4	90.6	70-130		%Rec	1	8/9/2020 3:23:09 PM	54246
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	8/9/2020 3:23:09 PM	54246
Surr: Dibromofluoromethane	102	70-130		%Rec	1	8/9/2020 3:23:09 PM	54246
Surr: Toluene-d8	95.3	70-130		%Rec	1	8/9/2020 3:23:09 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S5 Surface

Project: Bradley A 001

Collection Date: 8/4/2020 11:24:00 AM

Lab ID: 2008253-009

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 6:52:23 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/9/2020 3:51:55 PM	54246
Surr: BFB	104	70-130		%Rec	1	8/9/2020 3:51:55 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	13	9.5		mg/Kg	1	8/10/2020 7:45:21 PM	54253
Motor Oil Range Organics (MRO)	110	47		mg/Kg	1	8/10/2020 7:45:21 PM	54253
Surr: DNOP	101	30.4-154		%Rec	1	8/10/2020 7:45:21 PM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/9/2020 3:51:55 PM	54246
Toluene	ND	0.047		mg/Kg	1	8/9/2020 3:51:55 PM	54246
Ethylbenzene	ND	0.047		mg/Kg	1	8/9/2020 3:51:55 PM	54246
Xylenes, Total	ND	0.095		mg/Kg	1	8/9/2020 3:51:55 PM	54246
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	8/9/2020 3:51:55 PM	54246
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	8/9/2020 3:51:55 PM	54246
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/9/2020 3:51:55 PM	54246
Surr: Toluene-d8	99.0	70-130		%Rec	1	8/9/2020 3:51:55 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S5 1'

Project: Bradley A 001

Collection Date: 8/4/2020 11:27:00 AM

Lab ID: 2008253-010

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 7:04:47 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/9/2020 4:20:38 PM	54246
Surr: BFB	101	70-130		%Rec	1	8/9/2020 4:20:38 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/10/2020 8:09:15 PM	54253
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/10/2020 8:09:15 PM	54253
Surr: DNOP	91.8	30.4-154		%Rec	1	8/10/2020 8:09:15 PM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/9/2020 4:20:38 PM	54246
Toluene	ND	0.049		mg/Kg	1	8/9/2020 4:20:38 PM	54246
Ethylbenzene	ND	0.049		mg/Kg	1	8/9/2020 4:20:38 PM	54246
Xylenes, Total	ND	0.097		mg/Kg	1	8/9/2020 4:20:38 PM	54246
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	8/9/2020 4:20:38 PM	54246
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/9/2020 4:20:38 PM	54246
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/9/2020 4:20:38 PM	54246
Surr: Toluene-d8	97.9	70-130		%Rec	1	8/9/2020 4:20:38 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW1

Project: Bradley A 001

Collection Date: 8/4/2020 11:30:00 AM

Lab ID: 2008253-011

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 7:17:12 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/9/2020 4:49:23 PM	54246
Surr: BFB	101	70-130		%Rec	1	8/9/2020 4:49:23 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	13	9.6		mg/Kg	1	8/10/2020 8:33:12 PM	54253
Motor Oil Range Organics (MRO)	210	48		mg/Kg	1	8/10/2020 8:33:12 PM	54253
Surr: DNOP	102	30.4-154		%Rec	1	8/10/2020 8:33:12 PM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/9/2020 4:49:23 PM	54246
Toluene	ND	0.048		mg/Kg	1	8/9/2020 4:49:23 PM	54246
Ethylbenzene	ND	0.048		mg/Kg	1	8/9/2020 4:49:23 PM	54246
Xylenes, Total	ND	0.096		mg/Kg	1	8/9/2020 4:49:23 PM	54246
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	8/9/2020 4:49:23 PM	54246
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	8/9/2020 4:49:23 PM	54246
Surr: Dibromofluoromethane	108	70-130		%Rec	1	8/9/2020 4:49:23 PM	54246
Surr: Toluene-d8	98.8	70-130		%Rec	1	8/9/2020 4:49:23 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW2

Project: Bradley A 001

Collection Date: 8/4/2020 11:30:00 AM

Lab ID: 2008253-012

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 7:29:37 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/9/2020 5:18:08 PM	54246
Surr: BFB	99.5	70-130		%Rec	1	8/9/2020 5:18:08 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	51	47		mg/Kg	5	8/12/2020 4:52:07 AM	54253
Motor Oil Range Organics (MRO)	1800	240		mg/Kg	5	8/12/2020 4:52:07 AM	54253
Surr: DNOP	99.6	30.4-154		%Rec	5	8/12/2020 4:52:07 AM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.023		mg/Kg	1	8/9/2020 5:18:08 PM	54246
Toluene	ND	0.047		mg/Kg	1	8/9/2020 5:18:08 PM	54246
Ethylbenzene	ND	0.047		mg/Kg	1	8/9/2020 5:18:08 PM	54246
Xylenes, Total	ND	0.094		mg/Kg	1	8/9/2020 5:18:08 PM	54246
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%Rec	1	8/9/2020 5:18:08 PM	54246
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	8/9/2020 5:18:08 PM	54246
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/9/2020 5:18:08 PM	54246
Surr: Toluene-d8	99.7	70-130		%Rec	1	8/9/2020 5:18:08 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW3

Project: Bradley A 001

Collection Date: 8/4/2020 11:36:00 AM

Lab ID: 2008253-013

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 7:42:01 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/9/2020 5:46:52 PM	54246
Surr: BFB	103	70-130		%Rec	1	8/9/2020 5:46:52 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/12/2020 4:06:06 PM	54253
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/12/2020 4:06:06 PM	54253
Surr: DNOP	101	30.4-154		%Rec	1	8/12/2020 4:06:06 PM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/9/2020 5:46:52 PM	54246
Toluene	ND	0.048		mg/Kg	1	8/9/2020 5:46:52 PM	54246
Ethylbenzene	ND	0.048		mg/Kg	1	8/9/2020 5:46:52 PM	54246
Xylenes, Total	ND	0.096		mg/Kg	1	8/9/2020 5:46:52 PM	54246
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	8/9/2020 5:46:52 PM	54246
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	8/9/2020 5:46:52 PM	54246
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/9/2020 5:46:52 PM	54246
Surr: Toluene-d8	105	70-130		%Rec	1	8/9/2020 5:46:52 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW4

Project: Bradley A 001

Collection Date: 8/4/2020 11:39:00 AM

Lab ID: 2008253-014

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 7:54:26 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/9/2020 6:15:42 PM	54246
Surr: BFB	102	70-130		%Rec	1	8/9/2020 6:15:42 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/10/2020 9:44:57 PM	54253
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/10/2020 9:44:57 PM	54253
Surr: DNOP	93.7	30.4-154		%Rec	1	8/10/2020 9:44:57 PM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	8/9/2020 6:15:42 PM	54246
Toluene	ND	0.050		mg/Kg	1	8/9/2020 6:15:42 PM	54246
Ethylbenzene	ND	0.050		mg/Kg	1	8/9/2020 6:15:42 PM	54246
Xylenes, Total	ND	0.10		mg/Kg	1	8/9/2020 6:15:42 PM	54246
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	8/9/2020 6:15:42 PM	54246
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/9/2020 6:15:42 PM	54246
Surr: Dibromofluoromethane	108	70-130		%Rec	1	8/9/2020 6:15:42 PM	54246
Surr: Toluene-d8	101	70-130		%Rec	1	8/9/2020 6:15:42 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2008253

Date Reported: 8/13/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW5

Project: Bradley A 001

Collection Date: 8/4/2020 11:41:00 AM

Lab ID: 2008253-015

Matrix: SOIL

Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/11/2020 8:06:51 PM	54342
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/9/2020 6:44:26 PM	54246
Surr: BFB	103	70-130		%Rec	1	8/9/2020 6:44:26 PM	54246
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/10/2020 10:08:50 PM	54253
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/10/2020 10:08:50 PM	54253
Surr: DNOP	90.3	30.4-154		%Rec	1	8/10/2020 10:08:50 PM	54253
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.023		mg/Kg	1	8/9/2020 6:44:26 PM	54246
Toluene	ND	0.047		mg/Kg	1	8/9/2020 6:44:26 PM	54246
Ethylbenzene	ND	0.047		mg/Kg	1	8/9/2020 6:44:26 PM	54246
Xylenes, Total	ND	0.093		mg/Kg	1	8/9/2020 6:44:26 PM	54246
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%Rec	1	8/9/2020 6:44:26 PM	54246
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	8/9/2020 6:44:26 PM	54246
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/9/2020 6:44:26 PM	54246
Surr: Toluene-d8	102	70-130		%Rec	1	8/9/2020 6:44:26 PM	54246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008253

13-Aug-20

Client: Souder, Miller & Associates**Project:** Bradley A 001

Sample ID: MB-54342	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54342	RunNo: 70993								
Prep Date: 8/11/2020	Analysis Date: 8/11/2020	SeqNo: 2473355	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54342	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54342	RunNo: 70993								
Prep Date: 8/11/2020	Analysis Date: 8/11/2020	SeqNo: 2473356	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID: MB-54328	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54328	RunNo: 71001								
Prep Date: 8/11/2020	Analysis Date: 8/11/2020	SeqNo: 2473814	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54328	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54328	RunNo: 71001								
Prep Date: 8/11/2020	Analysis Date: 8/11/2020	SeqNo: 2473815	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008253

13-Aug-20

Client: Souder, Miller & Associates**Project:** Bradley A 001

Sample ID: LCS-54245	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 54245		RunNo: 70967							
Prep Date: 8/6/2020	Analysis Date: 8/7/2020		SeqNo: 2472659		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10	50.00	0	117	70	130			
Surr: DNOP	5.2		5.000		104	30.4	154			

Sample ID: MB-54245	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 54245		RunNo: 70967							
Prep Date: 8/6/2020	Analysis Date: 8/7/2020		SeqNo: 2472662		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		120	30.4	154			

Sample ID: MB-54254	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 54254		RunNo: 70975							
Prep Date: 8/7/2020	Analysis Date: 8/10/2020		SeqNo: 2472783		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		94.6	30.4	154			

Sample ID: MB-54253	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 54253		RunNo: 70975							
Prep Date: 8/7/2020	Analysis Date: 8/10/2020		SeqNo: 2472784		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		92.8	30.4	154			

Sample ID: LCS-54254	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 54254		RunNo: 70975							
Prep Date: 8/7/2020	Analysis Date: 8/10/2020		SeqNo: 2472785		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.9	30.4	154			

Sample ID: LCS-54253	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 54253		RunNo: 70975							
Prep Date: 8/7/2020	Analysis Date: 8/10/2020		SeqNo: 2472786		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008253

13-Aug-20

Client: Souder, Miller & Associates**Project:** Bradley A 001

Sample ID: LCS-54253	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 54253			RunNo: 70975						
Prep Date: 8/7/2020	Analysis Date: 8/10/2020			SeqNo: 2472786	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.7	70	130			
Surr: DNOP	4.2		5.000		83.2	30.4	154			

Sample ID: LCS-54255	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 54255			RunNo: 70976						
Prep Date: 8/7/2020	Analysis Date: 8/10/2020			SeqNo: 2472908	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		100	30.4	154			

Sample ID: MB-54255	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 54255			RunNo: 70976						
Prep Date: 8/7/2020	Analysis Date: 8/11/2020			SeqNo: 2472909	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.7		10.00		56.6	30.4	154			

Sample ID: MB-54340	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 54340			RunNo: 71011						
Prep Date: 8/11/2020	Analysis Date: 8/12/2020			SeqNo: 2474101	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		123	30.4	154			

Sample ID: LCS-54340	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 54340			RunNo: 71011						
Prep Date: 8/11/2020	Analysis Date: 8/12/2020			SeqNo: 2474102	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		119	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008253

13-Aug-20

Client: Souder, Miller & Associates**Project:** Bradley A 001

Sample ID: mb-54239	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 54239	RunNo: 70930								
Prep Date: 8/6/2020	Analysis Date: 8/8/2020	SeqNo: 2470354 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		101	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.49		0.5000		97.4	70	130			

Sample ID: lcs-54239	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 54239	RunNo: 70930								
Prep Date: 8/6/2020	Analysis Date: 8/8/2020	SeqNo: 2470355 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.2	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.3	0.10	3.000	0	111	80	120			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.9	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		105	70	130			
Surr: Toluene-d8	0.49		0.5000		98.0	70	130			

Sample ID: mb-54246	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 54246	RunNo: 70930								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2470434 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.5	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.8	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		105	70	130			
Surr: Toluene-d8	0.48		0.5000		95.5	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008253

13-Aug-20

Client: Souder, Miller & Associates**Project:** Bradley A 001

Sample ID: Ics-54246	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 54246	RunNo: 70930								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2470435	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.0	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.4	0.10	3.000	0	112	80	120			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.47		0.5000		94.9	70	130			

Sample ID: Ics-54251	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 54251	RunNo: 70944								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2471270	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.5	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.48		0.5000		96.8	70	130			

Sample ID: mb-54251	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 54251	RunNo: 70944								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2471271	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.3	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.48		0.5000		95.4	70	130			

Sample ID: 2008253-006ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: S3 1'	Batch ID: 54246	RunNo: 70944								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2471273	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.023	0.9183	0	93.9	71.1	115			
Toluene	0.93	0.046	0.9183	0	102	79.6	132			
Ethylbenzene	0.92	0.046	0.9183	0	101	83.8	134			
Xylenes, Total	2.9	0.092	2.755	0	105	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.44		0.4591		96.1	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.4591		97.4	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008253

13-Aug-20

Client: Souder, Miller & Associates**Project:** Bradley A 001

Sample ID: 2008253-006ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: S3 1'	Batch ID: 54246	RunNo: 70944								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2471273 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.49		0.4591		107	70	130			
Surr: Toluene-d8	0.44		0.4591		96.4	70	130			

Sample ID: 2008253-006amsd	SampType: MSD4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: S3 1'	Batch ID: 54246	RunNo: 70944								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2471274 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	0.9960	0	98.0	71.1	115	12.3	20	
Toluene	1.0	0.050	0.9960	0	105	79.6	132	11.3	20	
Ethylbenzene	1.0	0.050	0.9960	0	102	83.8	134	9.64	20	
Xylenes, Total	3.3	0.10	2.988	0	110	82.4	132	13.1	20	
Surr: 1,2-Dichloroethane-d4	0.48		0.4980		96.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.49		0.4980		98.9	70	130	0	0	
Surr: Dibromofluoromethane	0.56		0.4980		112	70	130	0	0	
Surr: Toluene-d8	0.49		0.4980		97.8	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008253

13-Aug-20

Client: Souder, Miller & Associates**Project:** Bradley A 001

Sample ID: mb-54239	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 54239	RunNo: 70930								
Prep Date: 8/6/2020	Analysis Date: 8/8/2020	SeqNo: 2470388 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	500		500.0		99.7	70	130			

Sample ID: lcs-54239	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 54239	RunNo: 70930								
Prep Date: 8/6/2020	Analysis Date: 8/8/2020	SeqNo: 2470389 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.4	70	130			
Surr: BFB	530		500.0		106	70	130			

Sample ID: mb-54246	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 54246	RunNo: 70930								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2470422 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		98.4	70	130			

Sample ID: lcs-54246	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 54246	RunNo: 70930								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2470423 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.7	70	130			
Surr: BFB	500		500.0		99.0	70	130			

Sample ID: lcs-54251	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 54251	RunNo: 70944								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2471308 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	500		500.0		100	70	130			

Sample ID: mb-54251	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 54251	RunNo: 70944								
Prep Date: 8/6/2020	Analysis Date: 8/9/2020	SeqNo: 2471309 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	510		500.0		103	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Souder, Miller & Associates

Work Order Number: 2008253

RcptNo: 1

Received By: Juan Rojas 8/6/2020 8:00:00 AM

Completed By: Juan Rojas 8/6/2020 9:26:21 AM

Reviewed By: *mg* *08/06/20*

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☐ No ☒ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

of preserved bottles checked for pH:
(<2 or >12 unless noted)

Adjusted? ☐

Checked by: *SPA 8-6-20*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good				
2	2.1	Good				
3	-0.4	Good				

Chain-of-Custody Record

Client: SMA

Mailing Address: _____

Phone #: _____

email or Fax#: _____

QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: 5 day rush

☐ Standard ☒ Rush

Project Name: Bradley A #001

Project #: _____

Analysis Request

Project Manager: Asley Maxwell

Sampler: Alicia A. Lopez

On Ice: ☒ Yes ☐ No

of Coolers: 3

Cooler Temp (including CF): See Remarks (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
8/4/20	11:36	soil	SW3	4 oz	ice	7005753
1	11:39	1	SW4	1	1	-013
1	11:41	1	SW5	1	1	-014
						-015

BTX / MTBE / TMB's (8021)

TPH 8015D (GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Date: 8/4/20 Time: 3:30

Date: 8/5/20 Time: 1400

Relinquished by: [Signature]

Relinquished by: [Signature]

Received by: [Signature] Date: 8/5/20 Time: 8:00

Received by: [Signature] Date: 8/5/20 Time: 8:00

Remarks:

3.3-0=3.3

2.1-0=2.1

-0.4-0=-0.4

Bill Devan



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

August 26, 2020

Lynn A. Acosta
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-8801
FAX

RE: Bradley A 1

OrderNo.: 2008A84

Dear Lynn A. Acosta:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/20/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2008A84

Date Reported: 8/26/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW1

Project: Bradley A 1

Collection Date: 8/18/2020 9:00:00 AM

Lab ID: 2008A84-001

Matrix: SOIL

Received Date: 8/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/24/2020 3:09:18 PM	54601
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/24/2020 3:09:18 PM	54601
Surr: DNOP	104	30.4-154		%Rec	1	8/24/2020 3:09:18 PM	54601
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/23/2020 6:05:31 AM	54588
Surr: BFB	99.9	75.3-105		%Rec	1	8/23/2020 6:05:31 AM	54588

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 5

Analytical Report

Lab Order 2008A84

Date Reported: 8/26/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW2

Project: Bradley A 1

Collection Date: 8/18/2020 9:20:00 AM

Lab ID: 2008A84-002

Matrix: SOIL

Received Date: 8/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/25/2020 2:22:19 PM	54601
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/25/2020 2:22:19 PM	54601
Surr: DNOP	107	30.4-154		%Rec	1	8/25/2020 2:22:19 PM	54601
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/23/2020 6:29:07 AM	54588
Surr: BFB	96.0	75.3-105		%Rec	1	8/23/2020 6:29:07 AM	54588

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 2 of 5

Analytical Report

Lab Order 2008A84

Date Reported: 8/26/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: S3-2'

Project: Bradley A 1

Collection Date: 8/18/2020 9:08:00 AM

Lab ID: 2008A84-003

Matrix: SOIL

Received Date: 8/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/24/2020 3:58:03 PM	54601
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/24/2020 3:58:03 PM	54601
Surr: DNOP	85.0	30.4-154		%Rec	1	8/24/2020 3:58:03 PM	54601
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/23/2020 6:52:40 AM	54588
Surr: BFB	97.2	75.3-105		%Rec	1	8/23/2020 6:52:40 AM	54588

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 3 of 5

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008A84

26-Aug-20

Client: Souder, Miller & Associates**Project:** Bradley A 1

Sample ID: MB-54601	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 54601	RunNo: 71331								
Prep Date: 8/21/2020	Analysis Date: 8/24/2020	SeqNo: 2489710	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		96.7	30.4	154			

Sample ID: LCS-54601	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 54601	RunNo: 71331								
Prep Date: 8/21/2020	Analysis Date: 8/24/2020	SeqNo: 2489711	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.3	70	130			
Surr: DNOP	4.8		5.000		97.0	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2008A84

26-Aug-20

Client: Souder, Miller & Associates**Project:** Bradley A 1

Sample ID: mb-54588	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 54588	RunNo: 71272								
Prep Date: 8/20/2020	Analysis Date: 8/23/2020	SeqNo: 2486966	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		95.1	75.3	105			

Sample ID: lcs-54588	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 54588	RunNo: 71272								
Prep Date: 8/20/2020	Analysis Date: 8/22/2020	SeqNo: 2486967	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	83.2	72.5	106			
Surr: BFB	1000		1000		104	75.3	105			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Souder, Miller & Associates

Work Order Number: 2008A84

RcptNo: 1

Received By: Juan Rojas

8/20/2020 8:00:00 AM

[Signature]

Completed By: Juan Rojas

8/20/2020 9:24:01 AM

[Signature]

Reviewed By:

[Signature]

08/20/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? ☐

Checked by: *[Signature]*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via:

☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

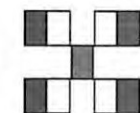
Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good				

<h1>Chain-of-Custody Record</h1>	Client:	SMH - Carlsbad	Turn-Around Time:	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush day <u>5</u> <u>TH</u>
	Mailing Address:		Project Name:	Bradley A #1
			Project #:	
			Phone #:	



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

email or Fax#:	Project Manager:	
QA/QC Package:	Lynn Acosta	
<input type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)	
Accreditation:	Sampler: AAL	
<input type="checkbox"/> NELAC	<input type="checkbox"/> Az Compliance	
<input type="checkbox"/> EDD (Type)	On Ice: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	# of Coolers:	

[illegible]

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/14/20		Low A A. L.	Aluminum		8/19/20	1100
8/19/20	1900	Aluminum	Aluminum		8/19/20	8:20

Remarks:

Direct Bill: Devon Energy
Lube Care 160



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

October 14, 2020

Ashley Maxwell
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-8801
FAX

RE: Bradley A

OrderNo.: 2010006

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 10 sample(s) on 10/1/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS1

Project: Bradley A

Collection Date: 9/29/2020 10:00:00 AM

Lab ID: 2010006-001

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	670	60		mg/Kg	20	10/8/2020 10:51:55 PM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/3/2020 12:35:02 AM	55606
Surr: BFB	101	70-130		%Rec	1	10/3/2020 12:35:02 AM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/3/2020 1:37:47 PM	55610
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/3/2020 1:37:47 PM	55610
Surr: DNOP	88.4	30.4-154		%Rec	1	10/3/2020 1:37:47 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	10/3/2020 12:35:02 AM	55606
Toluene	ND	0.048		mg/Kg	1	10/3/2020 12:35:02 AM	55606
Ethylbenzene	ND	0.048		mg/Kg	1	10/3/2020 12:35:02 AM	55606
Xylenes, Total	ND	0.095		mg/Kg	1	10/3/2020 12:35:02 AM	55606
Surr: 1,2-Dichloroethane-d4	88.0	70-130		%Rec	1	10/3/2020 12:35:02 AM	55606
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	10/3/2020 12:35:02 AM	55606
Surr: Dibromofluoromethane	102	70-130		%Rec	1	10/3/2020 12:35:02 AM	55606
Surr: Toluene-d8	101	70-130		%Rec	1	10/3/2020 12:35:02 AM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 15

Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS2

Project: Bradley A

Collection Date: 9/29/2020 10:10:00 AM

Lab ID: 2010006-002

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	570	60		mg/Kg	20	10/8/2020 11:04:20 PM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/2/2020 4:30:30 PM	55606
Surr: BFB	102	70-130		%Rec	1	10/2/2020 4:30:30 PM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/3/2020 2:07:55 PM	55610
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/3/2020 2:07:55 PM	55610
Surr: DNOP	88.4	30.4-154		%Rec	1	10/3/2020 2:07:55 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	10/2/2020 4:30:30 PM	55606
Toluene	ND	0.047		mg/Kg	1	10/2/2020 4:30:30 PM	55606
Ethylbenzene	ND	0.047		mg/Kg	1	10/2/2020 4:30:30 PM	55606
Xylenes, Total	ND	0.094		mg/Kg	1	10/2/2020 4:30:30 PM	55606
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	10/2/2020 4:30:30 PM	55606
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	10/2/2020 4:30:30 PM	55606
Surr: Dibromofluoromethane	112	70-130		%Rec	1	10/2/2020 4:30:30 PM	55606
Surr: Toluene-d8	106	70-130		%Rec	1	10/2/2020 4:30:30 PM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 2 of 15

Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS3

Project: Bradley A

Collection Date: 9/29/2020 10:20:00 AM

Lab ID: 2010006-003

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	280	60		mg/Kg	20	10/8/2020 11:16:44 PM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/2/2020 5:56:04 PM	55606
Surr: BFB	107	70-130		%Rec	1	10/2/2020 5:56:04 PM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/3/2020 2:17:48 PM	55610
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/3/2020 2:17:48 PM	55610
Surr: DNOP	89.7	30.4-154		%Rec	1	10/3/2020 2:17:48 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	10/2/2020 5:56:04 PM	55606
Toluene	ND	0.048		mg/Kg	1	10/2/2020 5:56:04 PM	55606
Ethylbenzene	ND	0.048		mg/Kg	1	10/2/2020 5:56:04 PM	55606
Xylenes, Total	ND	0.097		mg/Kg	1	10/2/2020 5:56:04 PM	55606
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%Rec	1	10/2/2020 5:56:04 PM	55606
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	10/2/2020 5:56:04 PM	55606
Surr: Dibromofluoromethane	109	70-130		%Rec	1	10/2/2020 5:56:04 PM	55606
Surr: Toluene-d8	107	70-130		%Rec	1	10/2/2020 5:56:04 PM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS4

Project: Bradley A

Collection Date: 9/29/2020 10:30:00 AM

Lab ID: 2010006-004

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	130	60		mg/Kg	20	10/8/2020 11:29:08 PM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/2/2020 6:52:56 PM	55606
Surr: BFB	103	70-130		%Rec	1	10/2/2020 6:52:56 PM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/3/2020 2:27:41 PM	55610
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/3/2020 2:27:41 PM	55610
Surr: DNOP	79.7	30.4-154		%Rec	1	10/3/2020 2:27:41 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	10/2/2020 6:52:56 PM	55606
Toluene	ND	0.049		mg/Kg	1	10/2/2020 6:52:56 PM	55606
Ethylbenzene	ND	0.049		mg/Kg	1	10/2/2020 6:52:56 PM	55606
Xylenes, Total	ND	0.098		mg/Kg	1	10/2/2020 6:52:56 PM	55606
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%Rec	1	10/2/2020 6:52:56 PM	55606
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	10/2/2020 6:52:56 PM	55606
Surr: Dibromofluoromethane	112	70-130		%Rec	1	10/2/2020 6:52:56 PM	55606
Surr: Toluene-d8	103	70-130		%Rec	1	10/2/2020 6:52:56 PM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW1

Project: Bradley A

Collection Date: 9/29/2020 10:40:00 AM

Lab ID: 2010006-005

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	10/8/2020 11:41:33 PM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/2/2020 7:21:25 PM	55606
Surr: BFB	103	70-130		%Rec	1	10/2/2020 7:21:25 PM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/3/2020 2:37:34 PM	55610
Motor Oil Range Organics (MRO)	210	48		mg/Kg	1	10/3/2020 2:37:34 PM	55610
Surr: DNOP	88.2	30.4-154		%Rec	1	10/3/2020 2:37:34 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	10/2/2020 7:21:25 PM	55606
Toluene	ND	0.049		mg/Kg	1	10/2/2020 7:21:25 PM	55606
Ethylbenzene	ND	0.049		mg/Kg	1	10/2/2020 7:21:25 PM	55606
Xylenes, Total	ND	0.097		mg/Kg	1	10/2/2020 7:21:25 PM	55606
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%Rec	1	10/2/2020 7:21:25 PM	55606
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	10/2/2020 7:21:25 PM	55606
Surr: Dibromofluoromethane	109	70-130		%Rec	1	10/2/2020 7:21:25 PM	55606
Surr: Toluene-d8	105	70-130		%Rec	1	10/2/2020 7:21:25 PM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW2

Project: Bradley A

Collection Date: 9/29/2020 10:50:00 AM

Lab ID: 2010006-006

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	10/8/2020 11:53:57 PM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/2/2020 7:49:50 PM	55606
Surr: BFB	99.6	70-130		%Rec	1	10/2/2020 7:49:50 PM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	9.8	9.0		mg/Kg	1	10/3/2020 2:47:24 PM	55610
Motor Oil Range Organics (MRO)	410	45		mg/Kg	1	10/3/2020 2:47:24 PM	55610
Surr: DNOP	54.7	30.4-154		%Rec	1	10/3/2020 2:47:24 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	10/2/2020 7:49:50 PM	55606
Toluene	ND	0.048		mg/Kg	1	10/2/2020 7:49:50 PM	55606
Ethylbenzene	ND	0.048		mg/Kg	1	10/2/2020 7:49:50 PM	55606
Xylenes, Total	ND	0.097		mg/Kg	1	10/2/2020 7:49:50 PM	55606
Surr: 1,2-Dichloroethane-d4	91.7	70-130		%Rec	1	10/2/2020 7:49:50 PM	55606
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	10/2/2020 7:49:50 PM	55606
Surr: Dibromofluoromethane	105	70-130		%Rec	1	10/2/2020 7:49:50 PM	55606
Surr: Toluene-d8	99.8	70-130		%Rec	1	10/2/2020 7:49:50 PM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW3

Project: Bradley A

Collection Date: 9/29/2020 11:00:00 AM

Lab ID: 2010006-007

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	10/9/2020 12:06:22 AM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/2/2020 8:18:14 PM	55606
Surr: BFB	99.4	70-130		%Rec	1	10/2/2020 8:18:14 PM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/3/2020 2:57:13 PM	55610
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/3/2020 2:57:13 PM	55610
Surr: DNOP	89.5	30.4-154		%Rec	1	10/3/2020 2:57:13 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	10/2/2020 8:18:14 PM	55606
Toluene	ND	0.047		mg/Kg	1	10/2/2020 8:18:14 PM	55606
Ethylbenzene	ND	0.047		mg/Kg	1	10/2/2020 8:18:14 PM	55606
Xylenes, Total	ND	0.093		mg/Kg	1	10/2/2020 8:18:14 PM	55606
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%Rec	1	10/2/2020 8:18:14 PM	55606
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	10/2/2020 8:18:14 PM	55606
Surr: Dibromofluoromethane	101	70-130		%Rec	1	10/2/2020 8:18:14 PM	55606
Surr: Toluene-d8	99.7	70-130		%Rec	1	10/2/2020 8:18:14 PM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW4

Project: Bradley A

Collection Date: 9/29/2020 11:10:00 AM

Lab ID: 2010006-008

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	10/9/2020 12:18:47 AM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/2/2020 8:46:46 PM	55606
Surr: BFB	102	70-130		%Rec	1	10/2/2020 8:46:46 PM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	9.7	9.7		mg/Kg	1	10/3/2020 3:07:02 PM	55610
Motor Oil Range Organics (MRO)	360	49		mg/Kg	1	10/3/2020 3:07:02 PM	55610
Surr: DNOP	67.0	30.4-154		%Rec	1	10/3/2020 3:07:02 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	10/2/2020 8:46:46 PM	55606
Toluene	ND	0.048		mg/Kg	1	10/2/2020 8:46:46 PM	55606
Ethylbenzene	ND	0.048		mg/Kg	1	10/2/2020 8:46:46 PM	55606
Xylenes, Total	ND	0.096		mg/Kg	1	10/2/2020 8:46:46 PM	55606
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%Rec	1	10/2/2020 8:46:46 PM	55606
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	10/2/2020 8:46:46 PM	55606
Surr: Dibromofluoromethane	104	70-130		%Rec	1	10/2/2020 8:46:46 PM	55606
Surr: Toluene-d8	99.3	70-130		%Rec	1	10/2/2020 8:46:46 PM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW5

Project: Bradley A

Collection Date: 9/29/2020 11:20:00 AM

Lab ID: 2010006-009

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	10/9/2020 12:31:11 AM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/2/2020 9:15:20 PM	55606
Surr: BFB	99.7	70-130		%Rec	1	10/2/2020 9:15:20 PM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/3/2020 3:16:52 PM	55610
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/3/2020 3:16:52 PM	55610
Surr: DNOP	87.7	30.4-154		%Rec	1	10/3/2020 3:16:52 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	10/2/2020 9:15:20 PM	55606
Toluene	ND	0.048		mg/Kg	1	10/2/2020 9:15:20 PM	55606
Ethylbenzene	ND	0.048		mg/Kg	1	10/2/2020 9:15:20 PM	55606
Xylenes, Total	ND	0.097		mg/Kg	1	10/2/2020 9:15:20 PM	55606
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%Rec	1	10/2/2020 9:15:20 PM	55606
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	10/2/2020 9:15:20 PM	55606
Surr: Dibromofluoromethane	99.4	70-130		%Rec	1	10/2/2020 9:15:20 PM	55606
Surr: Toluene-d8	97.4	70-130		%Rec	1	10/2/2020 9:15:20 PM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2010006

Date Reported: 10/14/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS5

Project: Bradley A

Collection Date: 9/29/2020 11:30:00 AM

Lab ID: 2010006-010

Matrix: SOIL

Received Date: 10/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	280	60		mg/Kg	20	10/9/2020 1:08:25 AM	55737
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/3/2020 12:06:26 AM	55606
Surr: BFB	104	70-130		%Rec	1	10/3/2020 12:06:26 AM	55606
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/3/2020 3:26:40 PM	55610
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/3/2020 3:26:40 PM	55610
Surr: DNOP	95.1	30.4-154		%Rec	1	10/3/2020 3:26:40 PM	55610
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	10/3/2020 12:06:26 AM	55606
Toluene	ND	0.049		mg/Kg	1	10/3/2020 12:06:26 AM	55606
Ethylbenzene	ND	0.049		mg/Kg	1	10/3/2020 12:06:26 AM	55606
Xylenes, Total	ND	0.099		mg/Kg	1	10/3/2020 12:06:26 AM	55606
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%Rec	1	10/3/2020 12:06:26 AM	55606
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	10/3/2020 12:06:26 AM	55606
Surr: Dibromofluoromethane	108	70-130		%Rec	1	10/3/2020 12:06:26 AM	55606
Surr: Toluene-d8	102	70-130		%Rec	1	10/3/2020 12:06:26 AM	55606

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010006

14-Oct-20

Client: Souder, Miller & Associates**Project:** Bradley A

Sample ID: MB-55737	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 55737	RunNo: 72512								
Prep Date: 10/8/2020	Analysis Date: 10/8/2020	SeqNo: 2546299	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-55737	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 55737	RunNo: 72512								
Prep Date: 10/8/2020	Analysis Date: 10/8/2020	SeqNo: 2546300	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010006

14-Oct-20

Client: Souder, Miller & Associates**Project:** Bradley A

Sample ID: MB-55610	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 55610	RunNo: 72367								
Prep Date: 10/2/2020	Analysis Date: 10/3/2020	SeqNo: 2538326			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.6		10.00		85.8	30.4	154			

Sample ID: LCS-55610	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 55610	RunNo: 72367								
Prep Date: 10/2/2020	Analysis Date: 10/3/2020	SeqNo: 2538328			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	81.5	70	130			
Surr: DNOP	4.0		5.000		79.4	30.4	154			

Sample ID: 2010006-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: CS1	Batch ID: 55610	RunNo: 72367								
Prep Date: 10/2/2020	Analysis Date: 10/3/2020	SeqNo: 2538362			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.2	45.87	3.402	90.9	15	184			
Surr: DNOP	4.8		4.587		105	30.4	154			

Sample ID: 2010006-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: CS1	Batch ID: 55610	RunNo: 72367								
Prep Date: 10/2/2020	Analysis Date: 10/3/2020	SeqNo: 2538364			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	3.402	83.9	15	184	0.597	23.9	
Surr: DNOP	4.6		5.000		91.3	30.4	154	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010006

14-Oct-20

Client: Souder, Miller & Associates**Project:** Bradley A

Sample ID: mb-55606	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 55606	RunNo: 72362								
Prep Date: 10/1/2020	Analysis Date: 10/2/2020	SeqNo: 2537979 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.2	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		106	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: lcs-55606	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 55606	RunNo: 72362								
Prep Date: 10/1/2020	Analysis Date: 10/2/2020	SeqNo: 2537980 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.4	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.1	0.050	1.000	0	105	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.3	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		111	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: 2010006-002ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: CS2	Batch ID: 55606	RunNo: 72362								
Prep Date: 10/1/2020	Analysis Date: 10/2/2020	SeqNo: 2537984 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9990	0	104	71.1	115			
Toluene	1.3	0.050	0.9990	0	126	79.6	132			
Ethylbenzene	1.3	0.050	0.9990	0.02315	129	83.8	134			
Xylenes, Total	4.1	0.10	2.997	0	137	82.4	132			S
Surr: 1,2-Dichloroethane-d4	0.46		0.4995		92.8	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.4995		104	70	130			
Surr: Dibromofluoromethane	0.55		0.4995		109	70	130			
Surr: Toluene-d8	0.53		0.4995		105	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010006

14-Oct-20

Client: Souder, Miller & Associates**Project:** Bradley A

Sample ID: 2010006-002amsd		SampType: MSD4		TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: CS2		Batch ID: 55606		RunNo: 72362						
Prep Date: 10/1/2020		Analysis Date: 10/2/2020		SeqNo: 2537985		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9775	0	108	71.1	115			
Toluene	1.2	0.049	0.9775	0	125	79.6	132			
Ethylbenzene	1.3	0.049	0.9775	0.02315	129	83.8	134			
Xylenes, Total	3.9	0.098	2.933	0	133	82.4	132			S
Surr: 1,2-Dichloroethane-d4	0.46		0.4888		94.2	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.4888		99.8	70	130			
Surr: Dibromofluoromethane	0.52		0.4888		107	70	130			
Surr: Toluene-d8	0.50		0.4888		102	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 14 of 15

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010006

14-Oct-20

Client: Souder, Miller & Associates**Project:** Bradley A

Sample ID: mb-55606	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 55606	RunNo: 72362								
Prep Date: 10/1/2020	Analysis Date: 10/2/2020	SeqNo: 2538175 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	540		500.0		107	70	130			

Sample ID: lcs-55606	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 55606	RunNo: 72362								
Prep Date: 10/1/2020	Analysis Date: 10/2/2020	SeqNo: 2538176 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.4	70	130			
Surr: BFB	520		500.0		103	70	130			

Sample ID: 2010006-001ams	SampType: MS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: CS1	Batch ID: 55606	RunNo: 72362								
Prep Date: 10/1/2020	Analysis Date: 10/2/2020	SeqNo: 2538179 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.9	24.39	0	114	49.2	122			
Surr: BFB	500		487.8		102	70	130			

Sample ID: 2010006-001amsd	SampType: MSD	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: CS1	Batch ID: 55606	RunNo: 72362								
Prep Date: 10/1/2020	Analysis Date: 10/2/2020	SeqNo: 2538180 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.9	24.56	0	112	49.2	122	0.733	20	
Surr: BFB	510		491.2		103	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Souder, Miller & Associates

Work Order Number: 2010006

RcptNo: 1

Received By: Juan Rojas

10/1/2020 8:00:00 AM

Juan Rojas

Completed By: Juan Rojas

10/1/2020 8:46:02 AM

Juan Rojas

Reviewed By: *[Signature]*

10/1/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *EM 10/1/20*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

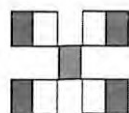
16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good				

Chain-of-Custody Record

Turn-Around Time:		<input type="checkbox"/> Standard <input type="checkbox"/> Rush	
Project Name:		Bradley A	
Project #:			
Project Manager:		Ashley Maxwell	
Sampler:		SO	
On Ice:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
# of Coolers:		1	
Cooler Temp (including CF):		2.4/-0.1/-2.3 (°C)	
Date	Time	Matrix	Sample Name
9/29/20	10:00	Soil	CS1
	10:10		CS2
	10:20		CS3
	10:30		CS4
	10:40		SW1
	10:50		SW2
	11:00		SW3
	11:10		SW4
	11:20		SW5
	11:30		CS5
Relinquished by:		Sebastian J.	
Date:	Time:		
9/30/20	1330		
Relinquished by:			
Date:	Time:		
9/30/20	1900		
Received by:		Via:	
Date:		Date:	
9/30/20		9/30/20	
Time:		Time:	
1900		1330	
Received by:		Via:	
Date:		Date:	
9/30/20		10/12/20	
Time:		Time:	
1900		8:00	



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

TPH:8015D(GRO / DRO / MRO) ☒

BTEX / MTBE / TMBs (8021) ☒

8081 Pesticides/8082 PCBs ☐

EDB (Method 504.1) ☐

PAHs by 8310 or 8270SIMS ☐

RCRA 8 Metals ☐

Cl⁻, Br⁻, NO₃⁻, NO₂⁻, PO₄³⁻, SO₄²⁻ ☒

8260 (VOA) ☐

8270 (Semi-VOA) ☐

Total Coliform (Present/Absent) ☐

Remarks:

Bill To Devon



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

November 06, 2020

Ashley Maxwell
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL:
FAX:

RE: Bradley A

OrderNo.: 2010C72

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/29/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2010C72

Date Reported: 11/6/2020

CLIENT: Souder, Miller & Associates

Client Sample ID: SW1

Project: Bradley A

Collection Date: 10/23/2020 3:10:00 PM

Lab ID: 2010C72-001

Matrix: SOIL

Received Date: 10/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	11/2/2020 7:13:23 PM	56160
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/31/2020 11:43:16 AM	56112
Surr: BFB	104	70-130		%Rec	1	10/31/2020 11:43:16 AM	56112
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/29/2020 7:22:55 PM	56116
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/29/2020 7:22:55 PM	56116
Surr: DNOP	96.0	30.4-154		%Rec	1	10/29/2020 7:22:55 PM	56116
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	10/30/2020 6:41:45 PM	56112
Toluene	ND	0.050		mg/Kg	1	10/30/2020 6:41:45 PM	56112
Ethylbenzene	ND	0.050		mg/Kg	1	10/30/2020 6:41:45 PM	56112
Xylenes, Total	ND	0.10		mg/Kg	1	10/30/2020 6:41:45 PM	56112
Surr: 1,2-Dichloroethane-d4	83.4	70-130		%Rec	1	10/30/2020 6:41:45 PM	56112
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	10/30/2020 6:41:45 PM	56112
Surr: Dibromofluoromethane	105	70-130		%Rec	1	10/30/2020 6:41:45 PM	56112
Surr: Toluene-d8	107	70-130		%Rec	1	10/30/2020 6:41:45 PM	56112

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2010C72

Date Reported: 11/6/2020

CLIENT: Souder, Miller & Associates

Client Sample ID: SW2

Project: Bradley A

Collection Date: 10/23/2020 3:20:00 PM

Lab ID: 2010C72-002

Matrix: SOIL

Received Date: 10/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	11/2/2020 7:25:47 PM	56160
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/30/2020 8:07:45 PM	56112
Surr: BFB	100	70-130		%Rec	1	10/30/2020 8:07:45 PM	56112
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/29/2020 7:46:35 PM	56116
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/29/2020 7:46:35 PM	56116
Surr: DNOP	93.7	30.4-154		%Rec	1	10/29/2020 7:46:35 PM	56116
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	10/30/2020 8:07:45 PM	56112
Toluene	ND	0.050		mg/Kg	1	10/30/2020 8:07:45 PM	56112
Ethylbenzene	ND	0.050		mg/Kg	1	10/30/2020 8:07:45 PM	56112
Xylenes, Total	ND	0.10		mg/Kg	1	10/30/2020 8:07:45 PM	56112
Surr: 1,2-Dichloroethane-d4	98.9	70-130		%Rec	1	10/30/2020 8:07:45 PM	56112
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	10/30/2020 8:07:45 PM	56112
Surr: Dibromofluoromethane	113	70-130		%Rec	1	10/30/2020 8:07:45 PM	56112
Surr: Toluene-d8	104	70-130		%Rec	1	10/30/2020 8:07:45 PM	56112

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2010C72

Date Reported: 11/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW4

Project: Bradley A

Collection Date: 10/23/2020 3:30:00 PM

Lab ID: 2010C72-003

Matrix: SOIL

Received Date: 10/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	11/2/2020 7:38:11 PM	56160
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/30/2020 9:33:49 PM	56112
Surr: BFB	104	70-130		%Rec	1	10/30/2020 9:33:49 PM	56112
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	10/29/2020 8:10:15 PM	56116
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/29/2020 8:10:15 PM	56116
Surr: DNOP	95.4	30.4-154		%Rec	1	10/29/2020 8:10:15 PM	56116
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	10/30/2020 9:33:49 PM	56112
Toluene	ND	0.049		mg/Kg	1	10/30/2020 9:33:49 PM	56112
Ethylbenzene	ND	0.049		mg/Kg	1	10/30/2020 9:33:49 PM	56112
Xylenes, Total	ND	0.098		mg/Kg	1	10/30/2020 9:33:49 PM	56112
Surr: 1,2-Dichloroethane-d4	86.6	70-130		%Rec	1	10/30/2020 9:33:49 PM	56112
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	10/30/2020 9:33:49 PM	56112
Surr: Dibromofluoromethane	107	70-130		%Rec	1	10/30/2020 9:33:49 PM	56112
Surr: Toluene-d8	105	70-130		%Rec	1	10/30/2020 9:33:49 PM	56112

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010C72

06-Nov-20

Client: Souder, Miller & Associates**Project:** Bradley A

Sample ID: MB-56160	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 56160	RunNo: 73082								
Prep Date: 11/2/2020	Analysis Date: 11/2/2020	SeqNo: 2569572	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-56160	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 56160	RunNo: 73082								
Prep Date: 11/2/2020	Analysis Date: 11/2/2020	SeqNo: 2569573	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.1	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 PQL Practical Quantitative Limit
 S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 P Sample pH Not In Range
 RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010C72

06-Nov-20

Client: Souder, Miller & Associates**Project:** Bradley A

Sample ID: MB-56116	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 56116	RunNo: 73025								
Prep Date: 10/29/2020	Analysis Date: 10/29/2020	SeqNo: 2567193	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.2	30.4	154			

Sample ID: LCS-56116	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56116	RunNo: 73025								
Prep Date: 10/29/2020	Analysis Date: 10/29/2020	SeqNo: 2567194	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	42	10	50.00	0	84.8	70	130			
Surr: DNOP	4.6		5.000		92.3	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Limit
S % Recovery outside of range due to dilution or matrix	

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010C72

06-Nov-20

Client: Souder, Miller & Associates**Project:** Bradley A

Sample ID: mb-56112	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 56112	RunNo: 73049								
Prep Date: 10/29/2020	Analysis Date: 10/30/2020	SeqNo: 2567865	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		83.8	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.5	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID: lcs-56112	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 56112	RunNo: 73049								
Prep Date: 10/29/2020	Analysis Date: 10/30/2020	SeqNo: 2567866	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.4	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.5	80	120			
Xylenes, Total	3.2	0.10	3.000	0	108	80	120			
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		89.0	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.1	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.52		0.5000		105	70	130			

Sample ID: 2010c72-002ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: SW2	Batch ID: 56112	RunNo: 73049								
Prep Date: 10/29/2020	Analysis Date: 10/30/2020	SeqNo: 2567869	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	0.9804	0	92.7	71.1	115			
Toluene	1.1	0.049	0.9804	0	108	79.6	132			
Ethylbenzene	1.1	0.049	0.9804	0	110	83.8	134			
Xylenes, Total	3.3	0.098	2.941	0	111	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.43		0.4902		87.8	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.4902		99.9	70	130			
Surr: Dibromofluoromethane	0.50		0.4902		102	70	130			
Surr: Toluene-d8	0.52		0.4902		105	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010C72

06-Nov-20

Client: Souder, Miller & Associates**Project:** Bradley A

Sample ID: 2010c72-002amsd		SampType: MSD4		TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: SW2		Batch ID: 56112		RunNo: 73049						
Prep Date: 10/29/2020		Analysis Date: 10/30/2020		SeqNo: 2567870		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9852	0	95.3	71.1	115	3.24	20	
Toluene	1.1	0.049	0.9852	0	110	79.6	132	1.92	20	
Ethylbenzene	1.1	0.049	0.9852	0	110	83.8	134	0.0955	20	
Xylenes, Total	3.3	0.099	2.956	0	111	82.4	132	0.835	20	
Surr: 1,2-Dichloroethane-d4	0.43		0.4926		87.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.51		0.4926		103	70	130	0	0	
Surr: Dibromofluoromethane	0.52		0.4926		106	70	130	0	0	
Surr: Toluene-d8	0.51		0.4926		105	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2010C72

06-Nov-20

Client: Souder, Miller & Associates

Project: Bradley A

Sample ID: mb-56112	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 56112	RunNo: 73049								
Prep Date: 10/29/2020	Analysis Date: 10/30/2020	SeqNo: 2567890 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	520		500.0		103	70	130			

Sample ID: lcs-56112	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 56112	RunNo: 73049								
Prep Date: 10/29/2020	Analysis Date: 10/30/2020	SeqNo: 2567891 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.6	70	130			
Surr: BFB	520		500.0		104	70	130			

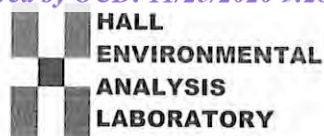
Sample ID: 2010c72-001ams	SampType: MS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: SW1	Batch ID: 56112	RunNo: 73049								
Prep Date: 10/29/2020	Analysis Date: 10/30/2020	SeqNo: 2567893 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	24.88	0	84.8	49.2	122			
Surr: BFB	510		497.5		102	70	130			

Sample ID: 2010c72-001amsd	SampType: MSD	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: SW1	Batch ID: 56112	RunNo: 73049								
Prep Date: 10/29/2020	Analysis Date: 10/30/2020	SeqNo: 2567894 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	23.90	0	90.0	49.2	122	2.04	20	
Surr: BFB	490		478.0		102	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Souder, Miller & Associates**

Work Order Number: **2010C72**

RcptNo: 1

Received By: **Emily Mocho**

10/29/2020 8:00:00 AM

Completed By: **Emily Mocho**

10/29/2020 8:57:55 AM

Reviewed By: **DAD 10/29/20**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

IO
10/29/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes			
2	1.5	Good	Yes			

APPENDIX E PHOTO LOG















District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 11336

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 11336
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Closure requires approval of NMSLO.	9/20/2022